

## ABSTRACT

The present invention relates to a method and an apparatus for treating an ammonia ( $\text{NH}_3$ )-containing gas, and particularly to a method and an apparatus for defusing  $\text{NH}_3$  in an exhaust gas or  $\text{NH}_3$  expelled from a waste water to a vapor phase; namely, the method and apparatus for treating an  $\text{NH}_3$ -containing gas which can oxidize and decompose highly efficiently  $\text{NH}_3$  of a high concentration into nitrogen.

In the present invention, the  $\text{NH}_3$ -containing gas passing through a catalyst tower (9) is allowed to be in contact with a pre-treatment catalyst layer 10 (1) having a flow path involving a catalyst layer having the function of oxidizing  $\text{NH}_3$  to generate NO in parallel to another flow path involving a catalyst layer not having the above function, and then, the resultant gas is allowed to be in contact with a catalyst layer (2) having the denitration function in combination with the function of oxidizing  $\text{NH}_3$  to generate NO.

According to the present invention, a gas containing  $\text{NH}_3$  even in a high concentration may be treated with good efficiency, without the thermal deterioration of a catalyst layer or the increase of the generation of  $\text{NO}_x$  as a by-product.